WHAT IS CLAIMED IS:

1. A foundation support system comprising plural generally cylindrical pile sections stacked one above another, said support system including:

an earth penetrating bit attached to a lowermost pile section including a transverse, generally cylindrical bottom plate member and earth penetrating means formed on a downward facing side of said bottom plate member, said bit including a part engageable with said lowermost pile section to prevent lateral excursion of said bit with respect to said pile sections during driving of said pile sections into the earth.

2. The support system set forth in Claim 1 wherein:

said bit includes a generally central upwardly extending post member secured to said bottom plate and adapted to be disposed in a central bore formed in said lowermost pile section.

3. The support system set forth in Claim 1 wherein:

said bit includes a generally cylindrical outer sidewall secured to said bottom plate and dimensioned to receive a lower end of said lowermost pile section therewithin.

4. The support system set forth in Claim 3 wherein:

said sidewall is dimensioned to receive said lowermost pile section rotatably within a recess formed between said sidewall and said bottom plate, and a layer of lubricant is provided between said bit and said lowermost pile section to facilitate rotation of said bit with respect to said lowermost pile section.

5. The support system set forth in Claim 1 wherein:

said earth penetrating means comprises plural teeth including respective faces inclined with respect to a central axis of said bit to facilitate penetration and rotation of said bit during installation of said support system.

6. The support system set forth in Claim 1 wherein:

said earth penetrating means comprises a downward extending conical projection on said bottom plate member.

7. The support system set forth in Claim 1 including:

an elongated rod member extending within a central bore of respective ones of said pile sections and connected to a part of said bit to minimize lateral excursion of said bit and said pile sections with respect to each other.

8. The support system set forth in Claim 7 wherein:

said bit includes a center post member extending within the bore of said lowermost pile section and adapted to be driveably connected to one end of said rod member.

9. A method for installing a foundation support system comprising a plurality of column stacked, generally cylindrical pile sections, comprising the steps of:

placing an earth penetrating bit connected to a lowermost one of said pile sections, said bit including a transverse bottom plate member having earth penetrating means thereon and a locating part for locating said bit with respect to said lowermost pile section to prevent lateral excursion of said bit with respect to said lowermost pile section; and

driving said bit and said lowermost pile section into the earth while providing for rotation of said bit with respect to said lowermost pile section.

10. The method set forth in Claim 9 including the step of:

inserting an elongated rod through a bore in said lowermost pile section, said rod being extendable through plural ones of said pile sections upon installation thereof in said support system to minimize lateral excursion of said pile sections with respect to each other.

11. The method set forth in Claim 10 including the step of:

connecting said rod to said bit and rotatably driving said rod and said bit during installation of said support system to facilitate penetration of said support system into the earth.

12. The method set forth in Claim 11 including the step of:

placing a collar between one of said pile sections and a jacking device, said collar including a slot formed therein for receiving said rod whereby said rod may extend upwardly in driving connection with drive means for rotating said rod as successive ones of said pile sections are added to said support system.